control panel

printer cover

ribbon cartridge

print head

edge guide

paper guide

paper thickness lever

power switch

knob

paper support

sprocket units

parallel interface

Options

Paper Handling Options

High-capacity cut-sheet feeder (C806871)

Feeds up to 150 single sheets of paper, 40 single-sheet multipart forms, 25 plain bond envelopes, or 50 postcards into the printer without reloading. If you also install the single-bin cut-sheet feeder, you can use both feeders as a double-bin cut-sheet feeder.

Single-bin cut-sheet feeder (C806791)

Feeds up to 50 sheets of ordinary single-sheet paper and is used in conjunction with the high-capacity cut-sheet feeder to create a double bin.

Roll paper holder (#8310)

Allows you to use your printer with 8.5-inch roll paper like that used with telex machines.

Optional Interface Cards

You can install an optional interface card to supplement your printer's built-in parallel interface and provide added network compatibility. The EPSON interface cards in the table below are compatible with your printer.

Model number	Card type
C823051	Serial Type B interface card
C823071	32KB Serial Type B interface card
C823121	LocalTalk interface card
C823141	Coax Type B interface card
C823151	Twinax Type B interface card
C823452	IEEE-1284 (Type B bidirectional) parallel interface card
C823622A	EpsonNet 10 Base T type B print server
C823642A	EpsonNet 10/100 Base TX type B print server with AC adapter

*   If you install the C823051 optional serial interface card, be sure to set the transfer speed to one of the following: 300, 600, 1200, 2400, 4800, 9600, or 19200 bps.

Printer Specifications

Mechanical

Printing method	24-pin impact dot matrix
Printing speed	High-speed draft 413 cps at 10 cpi
	Draft 310 cps at 10 cpi 372 cps at 12 cpi 465 cps at 15 cpi
	Draft condensed 264 cps at 17 cpi 310 cps at 20 cpi
	LQ 103 cps at 10 cpi 124 cps at 12 cpi 155 cps at 15 cpi
	LQ condensed 175 cps at 17 cpi 206 cps at 20 cpi
Printing direction	Bidirectional logic seeking for text and graphics printing. Unidirectional text or graphics printing can be selected using software commands.
Line spacing	1/6-inch or programmable in 1/360-inch increments
Printable columns	106 columns (at 10 cpi)
Resolution	360×180 dpi maximum
Paper feed methods	Friction (front paper entry) Push tractor (rear paper entry) Cut-sheet feeders (optional) Roll paper holder (optional)
Paper feed speed	Continuous 5 inches (127 mm)/second
	Intermittent 64 msec/line at 1/6-inch line spacing

Paper capacity	High-capacity cut-sheet feeder up to 150 sheets of 22 lb (82 g/m²) paper up to 25 plain or bond envelopes up to 30 airmail envelopes up to 50 postcards

Note The total thickness of the paper stack can be up to 0.59 inch (15 mm).

	Single-bin cut-sheet feeder up to 50 sheets of 22 lb (82 g/m²) paper

Note The total thickness of the paper stack can be up to 0.20 inch (5 mm).

Reliability	Total print volume 20 million lines (except print head)
	MTBF 10,000 POH (25% duty)
	Print head life 400 million strokes per wire
Acoustic noise	Approx. 55 dB (A) (ISO 7779 pattern)
Dimensions and weight	Height 9 inches (230 mm)
	Width 19.6 inches (497 mm)
	Depth 15.2 inches (387 mm)
	Weight LQ-680: approx. 19.8 lb (9.0 kg) LQ-680Pro: approx. 20.7 lb (9.4 kg)
Ribbon	Black ribbon cartridge (S015016)
	Ribbon life 2 million characters (LQ, 10 cpi, 48 dots/character)

Electronic

Interfaces	One standard bidirectional 8-bit parallel interface with IEEE 1284 nibble mode support and one optional interface slot
Buffer	64KB
Built-in fonts	*Bitmap fonts* EPSON Draft 10, 12, 15 cpi EPSON Roman 10, 12, 15 cpi, proportional EPSON Sans Serif 10, 12, 15 cpi, proportional EPSON Courier 10, 12, 15 cpi EPSON Prestige 10, 12 cpi EPSON Script 10 cpi EPSON OCR-B 10 cpi EPSON Orator 10 cpi EPSON Orator-S 10 cpi EPSON Script C proportional *Scalable fonts* EPSON Roman 10.5, 8 to 32 pt (every 2 pt) EPSON Sans Serif 10.5, 8 to 32 pt (every 2 pt) EPSON Roman T 10.5, 8 to 32 pt (every 2 pt) EPSON Sans Serif H 10.5, 8 to 32 pt (every 2 pt) *Barcode fonts* EAN-13, EAN-8, Interleaved 2 of 5, UPC-A, UPC-E, Code 39, Code 128, POSTNET
Character tables	One Italic and 12 graphical character tables (35 graphical character tables are available in some countries)
Character sets	14 international character sets and one legal character set

Electrical

	120 V	220 to 240 V
Input voltage range	99 to 132 V	198 to 264 V
Rated frequency range	50 to 60 Hz	
Input frequency range	49.5 to 60.5 Hz	
Rated current	1.0 A (maximum 2.5 A depending on the character type)	0.5 A (maximum 1.4 A depending on the character type)
Power consumption	Approx. 42 W (ISO/IEC 10561 letter pattern)	

Environmental

	Temperature	Humidity (without condensation)
Operation	41 to 95 °F (5 to 35 °C)	10 to 80% RH
Storage	–22 to 140 °F (–30 to 60 °C)	0 to 85% RH

Paper

Note: Use recycled paper and envelopes only under normal temperature and humidity conditions, as follows:

Temperature 59 to 77 °F (15 to 25 °C)
Humidity 30 to 60% RH

Do not load paper that has been folded or is damaged, wrinkled, or curled.

Ordinary single sheets: front and cut-sheet feeder entry

Width	Front 3.5 to 12 inches (90 to 304.8 mm) Cut-sheet feeders 3.9 to 11.6 inches (100 to 297 mm)
Length	Front 2.8 to 16.5 inches (70 to 420 mm) High-capacity cut-sheet feeder 2.8 to 16.5 inches (70 to 420 mm) Second bin cut-sheet feeder 8.2 to 16.5 inches (210 to 420 mm)
Thickness	Front 0.0025 to 0.0074 inch (0.065 to 0.19 mm) Cut-sheet feeders 0.0025 to 0.0047 inch (0.065 to 0.12 mm)
Weight	Front 14 to 42 lb (52 to 157 g/m^2) Cut-sheet feeders 14 to 24 lb (52 to 91 g/m^2)

Single-sheet multipart forms:
front and high-capacity cut-sheet feeder entry

Width	Front 3.5 to 12 inches (90 to 304.8 mm) High-capacity cut-sheet feeder 3.9 to 11.7 inches (100 to 297 mm)
Length	Front, top glue 2.8 to 16.5 inches (70 to 420 mm) Front, side glue 2.8 to 11.7 inches (70 to 297 mm) High capacity cut-sheet feeder 2.8 to 16.5 inches (70 to 420 mm)
Copies	1 original + up to 5 copies
Thickness	0.0047 to 0.018 inch (0.12 to 0.46 mm)
Weight	10 to 15 lb (40 to 58 g/m²)
Binding	Front Line glue at the top or side of form High-capacity cut-sheet feeder Line glue at the top of form

Envelopes:
front and high-capacity cut-sheet feeder entry

Size	No. 6	6.5 × 3.6 inches (165 × 92 mm)
	No. 10	9.5 × 4.1 inches (241 × 105 mm)
Thickness	0.0063 to 0.0205 inch (0.16 to 0.52 mm)	
Weight	12 to 24 lb (45 to 90 g/m²)	

Postcards:
front and high-capacity cut-sheet feeder entry

Width	3.9 to 7.8 inches (100 to 200 mm)
Length	3.9 to 7.8 inches (100 to 200 mm)
Thickness	0.0087 inch (0.22 mm)
Weight	51 lb (192 g/m²)

Roll paper:
rear entry with optional roll paper holder

Width	8.5 ± 0.12 inches (216 ± 3 mm)
Thickness	0.0028 to 0.0035 inch (0.07 to 0.09 mm)
Weight	14 to 22 lb (52 to 82 g/m²)

Continuous paper (standard and multipart):
rear entry

Width	4 to 12 inches (101.6 to 304.8 mm)
Length	3 to 22 inches (76.2 to 558.8 mm)
Copies	1 original + up to 5 copies

Thickness	Printable area 0.0025 to 0.018 inch (0.065 to 0.46 mm) Perforated edges up to 0.035 inch (0.9 mm)
Weight (not multipart)	14 to 34 lb (52 to 128 g/m²)
Weight (1 multipart sheet)	10 to 15 lb (40 to 58 g/m²)
Binding	Point glue and/or paper staples on both sides

❏ The ratio of the cut/uncut length at the perforation should be between 3:1 and 5:1.

❏ The thickness of the perforation part when extended should be 2 mm or less.

❏ The perforation between pages should not extend all the way to the edges of the paper. Uncut length on the edges should be 1 mm or more.

❏ When the horizontal and vertical perforation cuts intersect, do not print in between .12 inch (3 mm) above and below the horizontal perforation and in between 1.1 inch (28 mm) left and right of the vertical perforation.

Continuous paper with overlapping multipart
forms: rear entry

Width and length of the backing sheet	Same as standard continuous paper
Copies	1 original + up to 5 copies
Thickness	Printable area 0.0025 to 0.018 inch (0.065 to 0.46 mm) Overlapping area up to 0.028 inch (0.70 mm)

Labels: rear entry

|	
Label size	15/16 × 2.5 inches (23.8 × 63.5 mm) minimum 0.1 inch (2.5 mm) corner radius, minimum
Backing sheet width	4 to 12 inches (101.6 to 304.8 mm)
Backing sheet length (one page)	3 to 22 inches (76.2 to 558.8 mm)
Backing sheet thickness	0.0028 to 0.0035 inch (0.07 to 0.09 mm)
Total thickness	0.0063 to 0.0075 inch (0.16 to 0.19 mm)
Label weight	17 lb (64 g/m²)

Printable Area

Single sheets, envelopes, postcards and roll paper
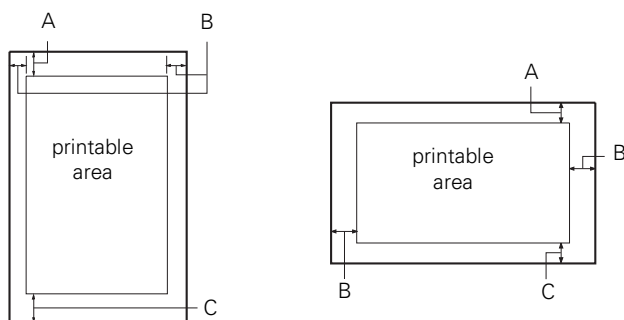
A The minimum top margin is 0 inch (0 mm). For envelopes and postcards loaded from cut-sheet feeder, it is 0.17 inch (4.2 mm).

B The minimum left and right margins are 0.12 inch (3.0 mm) each. The maximum printable width is 10.6 inches (269.2 mm). For single sheets wider than 10.8 inches (275.2 mm), the side margins increase proportionally to match the width of the paper.

C There is no minimum bottom margin.

Continuous paper (standard and multipart)
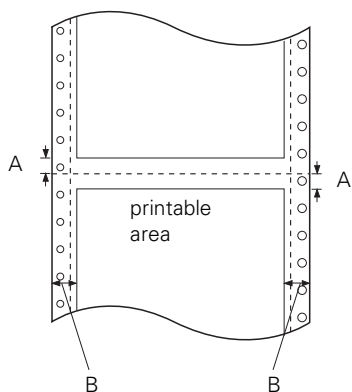
A The minimum top and bottom margins above and below the perforation are 0.17 inch (4.2 mm).

B The minimum left and right margins are 0.51 inch (13 mm). The maximum printable width is 10.6 inches (269.2 mm). For continuous paper wider than 11.6 inches (295.2 mm), the side margins increase proportionally to match the width of the paper.

Continuous paper with overlapping multipart forms
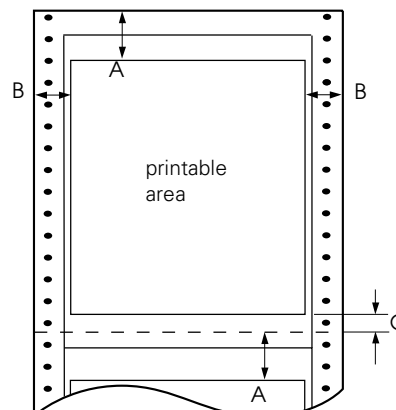
A The minimum top margin from the perforation down to the printable area is 0.83 inch (21.2 mm).

B The minimum left and right margins are 0.75 inch (19 mm). The maximum printable width is 10.5 inches (266.8 mm).

C The minimum bottom margin from the printable area down to the perforation is 0.17 inch (4.2 mm).

Safety Approvals

120 V

Safety standards
UL 1950
CSA C22.2 No. 950

EMI   FCC part 15 subpart B class B
CSA C108.8 class B

230 V

Safety standards
EN 60950

EMI   EN 55022 (CISPR pub. 22) class B
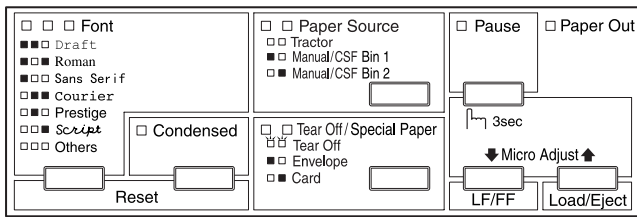AS/NZS 3548 class B

CE Marking

230 V

Low Voltage Directive 73/23/EEC
EN 60950

EMC Directive 89/336/EEC
EN 55022 Class B
EN 61000-3-2
EN 61000-3-3
EN 50082-1
EN 55024

Control Panel Buttons and Lights

Font button

Selects the font.

Font lights

Indicate which font is selected.

Condensed button

Turns condensed mode on and off.

Condensed light

On when condensed mode is on.

Reset

When you press both the Font and Condensed buttons simultaneously, the printer clears its buffer and restores its default settings.

Paper Source button and lights

Select a paper source.

Tear Off/Special Paper button

❏ Advances continuous paper to the tear-off position.

❏ Feeds continuous paper backward from the tear-off position to the top-of-form position.

❏ Turns on card mode or envelope mode.

Tear Off/Special Paper lights

❏ ❏ When continuous paper is in the tear-off position.

■ ❏ When the printer is in envelope mode.

❏ ■ When the printer is in card mode.

Pause button

Stops printing temporarily, and resumes printing when pressed again. When pressed for 3 seconds, turns on micro adjust mode.

Pause light

❏ On when the printer is paused.

❏ Flashes when the printer is in micro adjust mode or when the print head has overheated.

LF/FF button

❏ Feeds paper line by line when pressed quickly.

❏ Ejects a single sheet or advances continuous paper to the next top-of-form position when held down.

Load/Eject button

❏ Loads a single sheet of paper.

❏ Ejects a single sheet of paper when a sheet is loaded.

❏ Loads continuous paper from the standby position.

❏ Feeds continuous paper backward to the standby position in micro adjust mode.

Micro adjust mode

When you hold down the Pause button for 3 seconds, the printer enters the micro adjust mode. In this mode, you can press the LF/FF ⬇ and Load/Eject ⬆ buttons to adjust the top-of-form or tear-off position.

Paper Out light

❏ On when no paper is loaded in the selected paper source or paper is not loaded correctly.

❏ Flashes when paper has not been fully ejected or a paper jam has occurred.

Error Indicators

You can identify many common printer problems using the lights on the control panel. If your printer stops working and one or more control panel lights are on or flashing, or the printer beeps, use the following table to diagnose and fix the problem.

State of panel lights	Beep pattern	Problem
		Solution
❏ Pause	—	**The printer is paused.**
		Press the Pause button to resume printing.
	•••	**The printer cover is open.**
		Close the printer cover and press the Pause button.

State of panel lights	Beep pattern	Problem / Solution
☐ Paper Out ☐ Pause	•••	**No paper is loaded in the selected paper source.**
		Load paper in the printer. Then press the Pause button to turn off the Pause light, if necessary.
	•••	**The paper is not loaded correctly.**
		Remove your paper and reload it. Then press the Pause button to turn off the Pause light, if necessary.
	•••	**Paper is jammed in the printer.**
		Clear the paper jam as described on page 12.
☒ Paper Out ☐ Pause	•••	**Continuous paper is not fed back to the standby position.**
		Tear off the printed document at the perforation; then press the Load/Eject button. The printer feeds the paper to the standby position. Press the Pause button to turn off the Pause light.
	•••	**A single sheet of paper is not fully ejected.**
		Press the Load/Eject button to eject the sheet. Then press the Pause button to turn off the Pause light, if necessary.
	•••	**Paper is jammed in the printer.**
		Clear the paper jam as described on page 12.
☒ Paper Out ☒ Pause	•••	**The printer was unable to switch between paper sources because of a paper jam or other paper problems.**
		Remove any paper from the paper path and clear the paper jam as described on page 12. Then retry the paper source selection.
☒ Pause	—	**The print head has overheated.**
		Wait a few minutes; the printer resumes printing automatically once the print head cools.
☒ Paper Out ☒ Pause ☐ ☒ Tear Off Bin ☐ ☐ ☒ Font	•••••	**An unknown printer error has occurred.**
		Turn off the printer and leave it off for several minutes; then turn on the printer again. If the error recurs, contact EPSON.

☐ = on, ☒ = flashing

••• = short series of beeps (three beeps)

••••• = long series of beeps (five beeps)

The printer beeps once if you press a control panel button when the corresponding function is not available.

Status Monitor

The EPSON Status Monitor 3 utility comes with the printer but is available only for use with Windows 95, 98, 2000, or NT 4.0. It allows you to monitor your printer's status, alerts you when printer errors occur, and provides troubleshooting instructions.

Selecting a Paper Source

The printer can accommodate a variety of paper types through four paper sources: paper guide, tractor, optional cut-sheet feeder, or optional roll paper holder. The paper source you should select depends on the type of paper you want to use.

The following table shows which paper source to use for each paper type.

Paper type	Paper source			
	Tractor	Paper guide	Optional cut-sheet feeder	Optional roll paper holder
Continuous paper	○	—	—	—
Continuous multipart forms	○	—	—	—
Labels	○	—	—	—
Single sheets	—	○	○	—
Single-sheet multipart forms	—	○	○* (bin 1 only)	—
Envelopes	—	○	○ (bin 1 only)	—
Postcards	—	○	○ (bin 1 only)	—
Roll paper	—	—	—	○

○ You can use this paper type with this paper source.

— You cannot use this paper type with this paper source.

* You can use only carbonless single-sheet multipart forms that are glued at the top of the forms.

Use the Paper Source button on the control panel to select the paper source you want the printer to use.

```
□ □ Paper Source
□ □ Tractor
■ □ Manual/CSF Bin 1
□ ■ Manual/CSF Bin 2
```
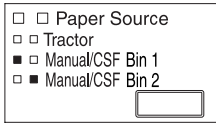
Choose from three settings:

❏ Select Tractor when you are using paper loaded on the tractor.

❏ Select Manual/CSF Bin1 to feed single sheets using the paper guide or optional cut-sheet feeder bin 1, or when you are using roll paper on the optional roll paper holder.

❏ Select Manual/CSF BIN2 to feed single sheets using the paper guide or optional cut-sheet feeder bin 2, or when you are using roll paper on the optional roll paper holder.

Adjusting the Paper Thickness Lever

You need to set the paper thickness lever to match the thickness of your paper. There are nine lever positions, from –1 to 7, plus an Auto position.
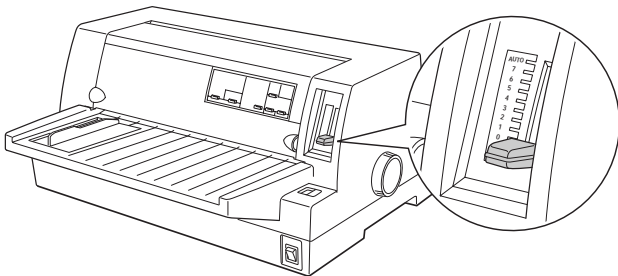
It is best to select Auto for all types of paper. This lets the printer automatically adjust itself to match the thickness each time it loads new paper. Note that printing time may be slowed. If you use the same type of paper every time, you may want to set the paper thickness lever to the appropriate manual position as described in the following table. This speeds up printing.

Paper type	Paper thickness lever position
Ordinary paper (single sheets or continuous paper)	–1 or 0
Multipart forms (single sheets or continuous paper) 2 parts (original + 1 copy) 3 parts (original + 2 copies) 4 parts (original + 3 copies) 5 parts (original + 4 copies) 6 parts (original + 5 copies)	1 2 3 5 7
Labels	2
Postcards	2
Envelopes*	2 to 6

* For thin envelopes, such as airmail envelopes, select position 2 or 3; for regular envelopes, select position 4; for thick envelopes, select position 4, 5, or 6.

Note: If you set the paper thickness lever to 1 or higher, be sure to set the lever back to the Auto position before you print on ordinary paper again.

Using the Tear-off Function

When you have finished printing, you can use the tear-off function to advance continuous paper on the tractor to the tear-off edge of the printer and tear off the printed sheets. When you resume printing, the printer automatically feeds paper back to the loading position so you can save paper that would normally be lost between documents.

You can use the tear-off function two ways:

❏ Press the Tear Off button on the control panel

❏ Use the default setting mode or the EPSON Remote! utility to select auto tear-off. (See "Changing the Default Settings" on page 14 for more information.)

If the perforation between pages is not aligned with the tear-off edge, you can adjust the tear-off position using the micro adjust feature. See "Adjusting the Tear-off Position" on page 12.

Caution: Never use the tear-off function to feed labels backward; they may come off their backing and jam the printer.

Using the Tear Off Button

You can use the Tear Off/Special Paper button to advance continuous paper to the tear-off position as follows:

1. Make sure printing has finished. Then press the Tear Off button until the two lights on the control panel start flashing. The printer advances the paper to the tear-off edge.

2. Tear off all printed pages at the tear-off edge. If the perforation is not aligned with the edge, adjust the tear-off position using the micro adjust feature. See "Adjusting the Tear-off Position" on page 12.
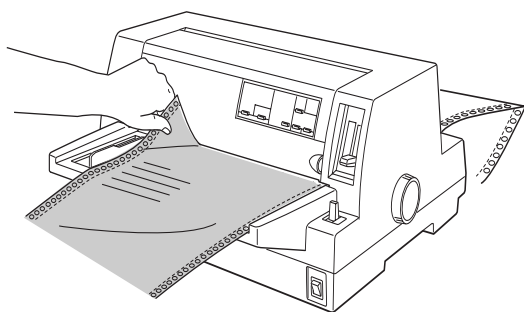
3. When you resume printing, the printer feeds the paper back to the top-of-form position and begins printing. (You can also manually feed the paper back to the top-of-form position by pressing the same button used to advance the paper.)

Using Auto Tear-off Mode

When you turn on the auto tear-off function in the printer's default-setting mode or the EPSON Remote! utility, the printer advances continuous paper to the tear-off position when you finish printing.

The printer advances paper to the tear-off position only when it receives a full page of data or a form-feed command and then receives no more data for three seconds.

For instructions on how to activate the auto tear-off function, see "Changing the Default Settings" on page 14 or use the EPSON Remote! utility (described in the *User's Guide*). While using the default setting mode or the utility, also make sure the page length is set correctly for your continuous paper.

After the paper has been advanced, tear off all printed pages and resume printing. You can leave the auto tear-off mode on even when you are using single sheets; the mode is disabled while you are using single sheets.

Removing Continuous Paper

1. After you finish printing, tear-off all printed pages using the tear-off function.

2. Press the Load/Eject button to feed the continuous paper backward out of the printer and into the standby position.

3. To completely remove continuous paper from the printer, open the sprocket covers. Remove the paper from the tractor unit, and then close the sprocket covers.

Using Continuous Multipart Forms

Your printer can use continuous multipart forms with up to six parts including the original. You can use carbonless or carbon-backed multipart forms.

 Caution Do not use carbon-interleaved multipart forms.

Before printing, make sure the paper thickness lever is set to the Auto position.

You can load continuous multipart forms the same way you load ordinary continuous paper. For instructions, see the *User's Guide*.

 Caution When printing on multipart forms, make sure that your software settings keep the printing entirely within the printable area of the forms. Printing on the edge of a multipart form can damage the print head. For more information, see "Printable Area" on page 5.

Using Overlapping Multipart Forms

You can print on overlapping multipart forms backed with continuous paper. The page length of the multipart forms is longer than that of the backing continuous paper. So when extended, one page's multipart forms overlap the next page's multipart forms. The thickness of this overlapping area is thicker than the printable area.

Before printing, set the paper thickness lever to the Auto position. Also turn on both the overlapping-forms and the skip-over-perforation settings using the default setting mode. See "Adjusting the Paper Thickness Lever" on page 8 and "Changing the Default Settings" on page 14 for more information.

You can load continuous multipart forms the same way you load ordinary continuous paper. (For instructions, see the *User's Guide*.)

Caution: When printing on overlapping multipart forms, make sure that your software settings keep the printing entirely within the printable area of the forms. Printing on the edge of a multipart form can damage the print head. For more information, see "Printable Area" on page 5.

Never feed overlapping multipart forms backward with the Load/Eject or Tear Off/Special Paper buttons. Doing so may cause paper jams or damage to the printer.

To remove overlapping multipart forms from the paper path after you finish printing, first tear off the paper at a point before the paper slot. Then use the LF/FF button to advance the remaining paper out of the printer.

Using Labels

When selecting labels for printing, always choose labels mounted on continuous backing sheets with sprocket holes for use with a tractor. Do not use labels on shiny single-sheet backing, because the backing sheet tends to slip and may not feed properly.

Load labels the same way you load ordinary continuous paper, and set the paper thickness lever to the Auto setting, or set it manually to 2 for faster throughput. See "Adjusting the Paper Thickness Lever" on page 8.

Caution: When printing on labels, make sure that your software settings keep the printing entirely within the printable area. Printing on the edge of a label can damage the print head.

Never feed labels backward with the Tear Off/Special Paper button. Labels can easily peel off their backing and jam the printer.

To remove labels from the paper path after you finish printing, first tear off the labels at a point before the paper slot. Then use the LF/FF button to advance the remaining labels out of the printer.

Because labels are especially sensitive to temperature and humidity, use them only under normal operating conditions.

Do not leave labels loaded in the printer between print jobs; they tend to curl and may come off their backing and jam the printer when you resume printing.

Using Single-Sheet Multipart Forms

Your printer can use single-sheet multipart forms with up to six parts including the original. You can use carbonless multipart forms, or carbon-backed multipart forms using the paper guide.

Caution: Do not use carbon-interleaved multipart forms.

Before printing, set the paper thickness lever to the correct position for your multipart forms as described on page 8, or to the Auto position.

You load single-sheet multipart forms the same way you load ordinary single sheets. (For instructions, see the *User's Guide.*)

Caution: When printing on multipart forms, make sure that your software settings keep the printing entirely within the printable area of the forms. Printing on the edge of a multipart form can damage the print head. For more information see "Printable Area" on page 5.

Load single-sheet multipart forms glued at the side of the form only from the paper guide, not from the optional cut-sheet feeder.

Using Envelopes

You can print on a variety of envelopes, loading them the same way you load single sheets: from the paper guide or with the optional cut-sheet feeder. Before printing, make sure the paper thickness lever is set to Auto or the correct position for your envelopes as described in the table on page 8. Then select Envelope by pressing the Tear Off/Special Paper button.

Load envelopes face up, flap-edge first.

Caution: When printing on envelopes, make sure that your software settings keep the printing entirely within the printable area. Printing on the edge of an envelope can damage the print head. For more information see "Printable Area" on page 5.

Use envelopes only under normal operating conditions.

For more information on loading envelopes, see the *User's Guide.*

Using Postcards

You can print on a variety of postcards, loading them the same way you load single sheets: from the paper guide or with the optional cut-sheet feeder. (For instructions on loading single sheets, see the *User's Guide*.)

Before printing, make sure the paper thickness lever is set to Auto or 2. Then select Card by pressing the Tear Off/Special Paper button on the control panel.

Load postcards printable side up, top edge first.

Caution

Card mode is available only when the paper thickness lever is set to Auto or 2 or higher on the scale.

When printing on postcards, make sure that your software settings keep the printing entirely within the printable area. Printing on the edge of a postcard can damage the print head. For more information, see the paper specifications on "Printable Area" on page 5.

Use postcards only under normal operating conditions.

Using Micro Adjust

The micro adjust feature allows you to move paper forward or backward in 1/180-inch increments. You can use this feature to adjust the loading, printing, and tear-off positions.
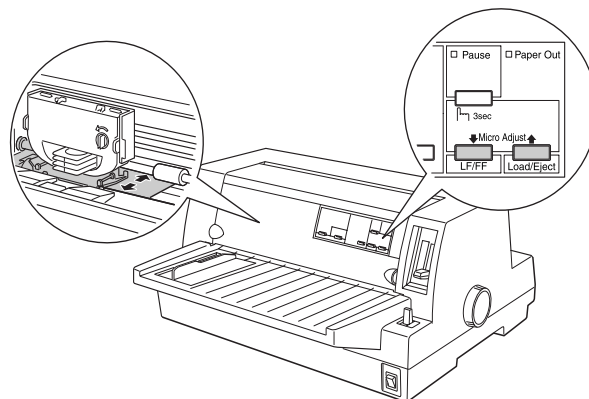
Adjusting the Loading Position

The loading position is the position of the paper after the printer loads it. If your printing appears too high or low on the page, you can change the loading position with the micro adjust feature described below.

Note

Top margin settings made in some application software override adjustments you make to the loading position with the micro adjust feature. If necessary, adjust the loading position in your software.

1. Make sure the printer is turned on. If necessary, lift up the printer cover so you can see the paper position.

2. Load either continuous or single-sheet paper. (Press the Load/Eject button to load continuous paper from the tractor or a single sheet from the optional cut-sheet feeder.)

3. Hold down the Pause button for about three seconds. The Pause light starts flashing and the printer enters the micro adjust mode.

4. Press the LF/FF ⬇ button to move the paper toward the front of the printer, or press the Load/Eject ⬆ button to move the paper toward the rear. The new loading position is set to the position where you release the buttons.


Note

When loading a sheet from the front (from the paper guide), pressing the LF/FF ⬇ button moves the loading position toward the top of the page. When loading a sheet from the rear (from the cut-sheet feeders or the tractor), pressing the LF/FF ⬇ button moves the loading position toward the bottom of the page.

The printer has a minimum and a maximum loading position. If you try to adjust the loading position beyond these limits, the printer beeps and stops moving the paper.

When the paper reaches the factory-set loading position, the printer beeps and paper feeding pauses briefly. Use the factory setting as a reference point when adjusting the loading position.

If you want to eliminate the top margin and print at the very top of the page, adjust the loading position so that the top of the paper lines up with the raised line on the ribbon mask, as shown below.

raised line
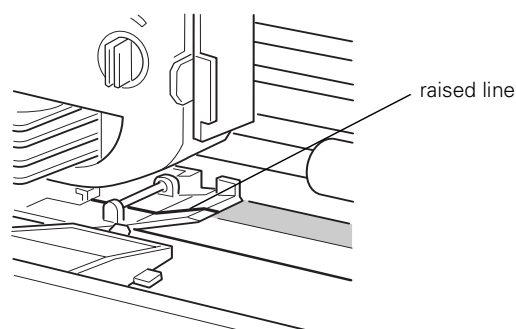
5. After you set the loading position, press the Pause button to turn off micro adjust mode.

For both single-sheet and continuous paper, your loading position setting remains in effect until you change it, even if you turn off the printer.

Adjusting the Printing Position

The printing position is the position on the page where the print head actually prints during a print job. You can change the current vertical printing position temporarily by using the micro adjust feature as described in the steps below.

Note Your printing position setting is in effect only until the next time you load paper or turn off the printer.

1. Make sure that the printer is not printing. If it is, press the Pause button to stop printing.

2. Hold down the Pause button for about three seconds. The Pause light begins flashing and the printer enters the micro adjust mode.

3. If necessary, open the printer cover to check the printing position, and press the LF/FF ⬇ button to feed paper forward or the Load/Eject ⬆ button to feed paper backward.

4. When your paper is positioned correctly, press the Pause button to turn off micro adjust mode and resume printing.

Adjusting the Tear-off Position

If your continuous paper perforation is not aligned with the tear-off edge, you can use the micro adjust feature to move the perforation to the tear-off position as follows:

1. Make sure both Tear Off lights are flashing (the paper is at the current tear-off position). You may need to press the Tear Off button.

2. Hold down the Pause button for about three seconds. The Pause light begins flashing and the printer enters the micro adjust mode.

3. Press the LF/FF ⬇ button to feed paper forward, or press the Load/Eject ⬆ button to feed paper backward, until the paper perforation is aligned with the tear-off edge.
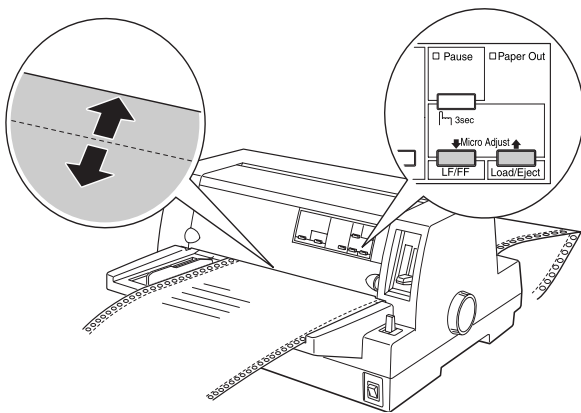
Note The printer has a minimum and a maximum tear-off position. If you try to adjust the tear-off position beyond these limits, the printer beeps and stops moving the paper.

4. Tear off the printed pages.

5. Press the Pause button to turn off micro adjust mode.

When you resume printing, the printer automatically feeds the paper back to the top-of-form position and begins printing. Your tear-off position setting remains in effect until you change it, even if you turn off the printer.

Clearing Paper Jams

1. Turn off the printer.

2. If a single sheet of paper is stuck on the paper guide, gently remove it.

3. Remove the printer cover. If continuous paper from the rear slot is loaded in the printer, remove the paper guide.

4. If continuous paper is jammed in the printer, tear off the supply at the perforation nearest the paper entry slot.

5. Turn the knob away from you to eject the paper in the printer. Remove any remaining pieces of paper.

Caution Use the knob to clear paper jams only when the printer is turned off; otherwise, you may damage the printer or lose the top-of-form or tear-off position.

6. Replace the paper guide, if necessary, and replace the printer cover. Then close the paper guide cover.

7. Turn on the printer. Make sure the Paper Out and Pause lights are off.

## Installing or Replacing the Ribbon Cartridge

EPSON recommends using genuine EPSON Ribbon Cartridges (S015016).

Warning
You may need to touch the print head when you install or replace the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before proceeding.

1. Make sure the printer is turned off.

2. Open the printer cover.
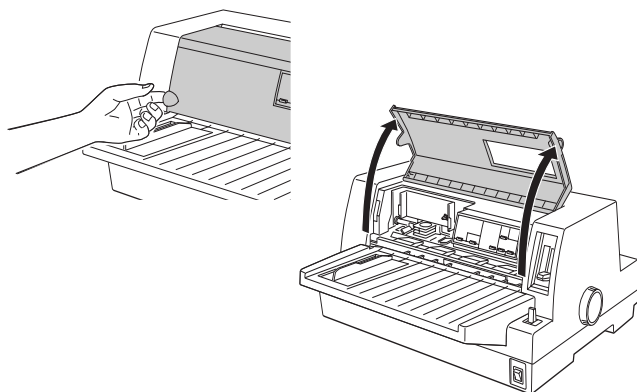
3. The print head should be in the ribbon replacement position, as shown below. It should be aligned with the indentation in the front metal plate.


indentation
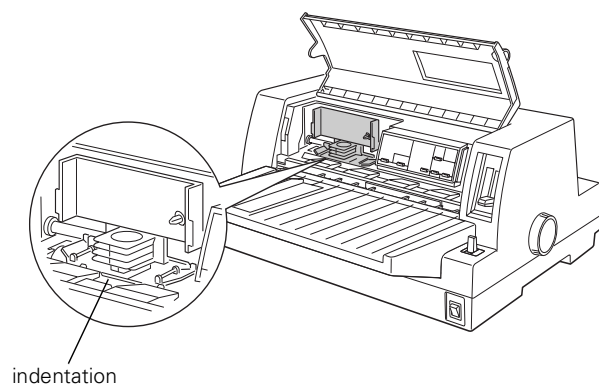
If it is not, close the printer cover and turn the printer on to move the print head to the ribbon replacement position. Wait a few seconds, then turn the printer off again and open the printer cover.

Caution
Following the steps below while the printer is turned on can damage the printer.

4. If a used ribbon cartridge is already installed, squeeze the tabs on each side of the cartridge, and pull the cartridge out of the printer. Discard the used cartridge.
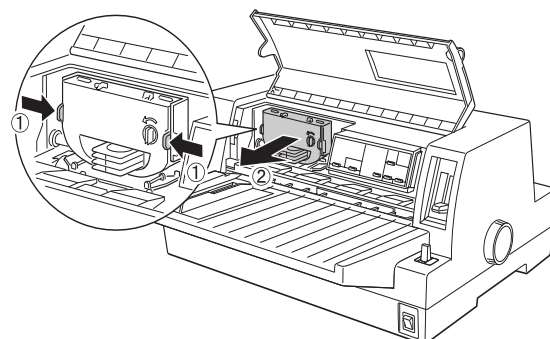

5. Remove the new ribbon cartridge from its package and turn the ribbon-tightening knob in the direction of the arrow to take up any slack in the ribbon.
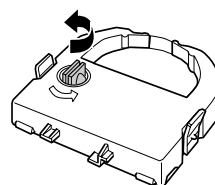
6. Hold the ribbon cartridge with the exposed ribbon down and the ribbon-tightening knob facing you, and guide the ribbon under the print head. Then snap the cartridge into place so that the tabs on both sides of the cartridge fit into the notches in the cartridge holder.

7. Hold the ribbon cartridge by its handle and push it firmly down into position; then press on both ends of the cartridge to make sure the plastic hooks fit into the slots.
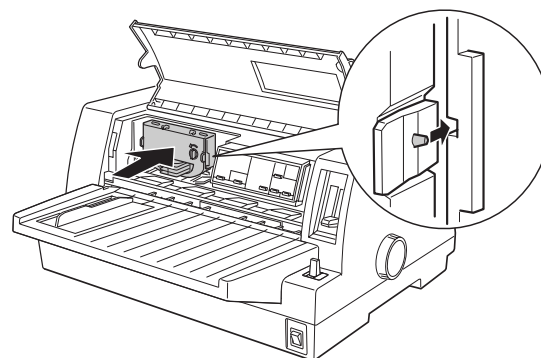
8. Turn the ribbon-tightening knob again to remove any slack in the ribbon and to make sure the ribbon moves freely.
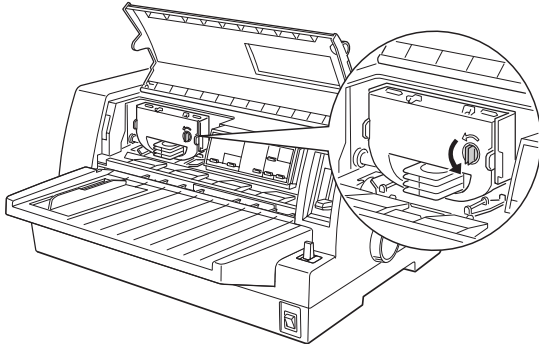
9. Close the printer cover.

Note

The printer pauses and cannot print when the printer cover is open.

Changing the Default Settings

While you can often set the default settings through your application software or printer driver, you may need to change a default setting from the printer's control panel using the default setting mode. The table below lists the default settings (in bold) and options you can select in this mode.

Settings	Options
Page length for tractor	Length in inches: 3, 3.5, 4, 5.5, 6, 7, 8, 8.5, **11**, 70/6, 12, 14, 17
Skip over perforation	On, **Off**
Auto tear-off	On, **Off**
Auto line feed	On, **Off**
Print direction	**Bi-D**, Uni-D, Auto
Software	**ESC/P2**, IBM 2390 Plus
0 slash	**0**, Ø
High speed draft	**On**, Off
I/F mode	**Auto**, Parallel, Optional
Auto I/F wait time	**10 seconds**, 30 seconds
Parallel I/F bidirectional mode	**On**, Off
Packet mode	**Auto**, Off
Auto CR (IBM 2390 Plus)*	On, **Off**
A.G.M. (IBM 2390 Plus)*	On, **Off**

Settings	Options
Character table*	Standard model: Italic, **PC 437**, PC 850, PC 860, PC 863, PC 865, PC 861, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC 858, ISO 8859-15, All other models: Italic, PC 437, PC 850, PC 437 Greek, PC 853, PC 855, PC 852, PC 857, PC 864, PC 866, PC 869, MAZOWIA, Code MJK, ISO 8859-7, ISO Latin 1T, Bulgaria, PC 774, Estonia, ISO 8859-2, PC 866 LAT, PC 866 UKR, PC APTEC, PC 708, PC 720, PC AR864, PC 860, PC863, PC 865, PC 861, BRASCII, Abicomp, Roman 8, ISO Latin 1, PC 858, ISO 8859-15, PC 771
International character set for Italic table	**Italic U.S.A.**, Italic France, Italic Germany, Italic U.K., Italic Denmark1, Italic Sweden, Italic Italy, Italic Spain1
Font	OCR-B, Orator, Orator-S, Script C, **Roman T**, Sans Serif H
Manual feed wait time	0.5 second, **1 second**, 1.5 seconds, 2 seconds
Buzzer	**On**, Off
Overlapping forms	On, **Off**

* These settings take effect only when IBM 2390 Plus emulation is selected.

Follow the steps below to enter the default setting mode and change the printer's default settings.

Note

To print all the instructions, you need 5 sheets of letter- or A4-size single-sheet paper or 5 pages of continuous paper. If you use single sheets without a cut-sheet feeder, you need to load a new sheet each time the printer ejects a printed sheet.

1. Make sure paper is loaded and the printer is turned off.

Caution

Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. While holding down the Font button, turn on the printer. The printer enters the default setting mode and prints the language selection instructions.

3. If you need to select a different language, press the Font button until the Font lights indicate the language you want, as described in the language selection instructions.

4. Press the Tear Off/Special Paper button to confirm your language selection and print the current default settings.

5. If you do not need to change any settings, go to step 6. If you want to change any of the default settings, press the Tear Off button to print the instructions (three pages) in the language you selected.

   Follow these instructions to change the default settings using the buttons on the printer's control panel.

6. When you finish, turn off the printer to exit the default setting mode. The current settings remain in effect until you change them again.

Bidirectional Alignment

If you notice that the vertical lines in your printout are not properly aligned, you can use the printer's bidirectional adjustment mode to correct this problem.

Note To complete the steps below, you need 5 single sheets or 5 pages of continuous paper that are at least 11 inches (279 mm) long and 9.5 inches (241 mm) wide. If you use single sheets without a cut-sheet feeder, you need to load a new sheet of paper each time the printer ejects a printed sheet onto the paper guide.

1. Make sure paper is loaded and the printer is turned off.

Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. While holding down the **Pause** button, turn on the printer. It enters the bidirectional adjustment mode, then prints instructions and the first set of alignment patterns.

3. As described in the instructions, compare the alignment patterns and select the pattern with the best alignment.

4. Follow the instructions to print the remaining sets of alignment patterns and select the pattern with the best alignment in each set.

5. After you select the best pattern in the final set of alignment patterns, turn off the printer and exit the bidirectional adjustment mode. Your selections are saved automatically.

Printing a Self Test

Running the self test helps you determine whether the printer or the computer is causing a printing problem. You can print the self test using either single sheets or continuous paper.

1. Make sure paper is loaded and the printer is turned off.

Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. To run the test using the Draft font, hold down the **LF/FF** button while you turn on the printer.

   To run the test using the printer's letter-quality fonts, hold down the **Load/Eject** button while you turn on the printer.

Either self test can help you determine the source of your printing problem; however, the draft test prints faster than the letter-quality test.

After a few seconds, the printer loads the paper automatically and begins printing the self test. A series of characters is printed.

Note To temporarily stop the self test, press the Pause button. To resume the test, press the Pause button again.

3. To end the self test, press the **Pause** button to stop printing. Then turn off the printer.

If the self test results are satisfactory, the printer is working properly and the problem probably results from your printer driver settings, application settings, computer, or interface cable. (Be sure to use a shielded interface cable.)

If the self test does not print properly, there is a problem with the printer.

Printing a Hex Dump

If you are an experienced user or a programmer, you can print a hexadecimal dump to isolate communication problems between the printer and your software program. In hex dump mode, the printer prints all data received from the computer as hexadecimal values.

You can print a hex dump using either single sheets or continuous paper.

Note Use continuous paper that is at least 9.5 inches (241 mm) wide (or A4 or letter-size single sheets).

1. Make sure paper is loaded and the printer is turned off.

Caution Whenever you turn off the printer, wait at least 5 seconds before turning it back on; otherwise you may damage the printer.

2. To enter hex dump mode, hold down both the **LF/FF** and **Load/Eject** buttons while you turn on the printer.

3. Open a software application and send a print job to the printer. Your printer prints all the codes it receives in hexadecimal format.

```
Hex Dump

1B 40 0D 1B 74 01 1B 36 1B 52 00 1B 50 1B 28 55    .@..t..6.R..P.(U
01 00 0A 1B 28 43 02 00 78 0F 1B 28 63 04 00 3C    ....(C..x..(c..<
00 3C 0F 1B 19 30 0D 1B 4A 18 1B 24 AA 05 1B 2A    .<...0..J..$¬..*
27 24 00 00 00 08 00 00 08 00 00 08 00 00 08 00    '$..............
00 08 00 00 08 00 00 08 00 00 08 00 00 08 00 00    ................
08 00 00 08 00 00 08 00 00 08 00 00 08 00 00 08    ................
00 00 08 00 00 08 00 00 08 00 00 08 00 00 08 00    ................
00 08 00 00 08 00 00 08 00 00 08 00 00 08 00 00    ................
08 00 00 08 00 00 08 00 00 08 00 00 08 00 00 08    ................
00 00 08 00 00 08 00 00 08 00 00 08 00 00 08 0D    ................
1B 4A 78 1B 24 0A 01 1B 2A 27 EC 03 00 00 38 00    .Jx.$...*'ì...8.
10 44 00 10 82 00 21 02 00 21 02 00 21 02 00 21    .D..é.!..!..!..!
02 00 21 02 00 21 04 00 21 04 00 11 08 00 0F FE    ..!..!..!......■
```

If characters are printable, they appear in the right column as ASCII characters. Nonprintable codes, such as control codes, are represented by dots. By comparing the characters printed in the right column with the printout of the hexadecimal codes, you can check the codes the printer is receiving.

4. To exit hex dump mode, press the Pause button to stop printing. Then eject or tear off the printed page(s) and turn off the printer.

Cleaning the Printer

1. Remove any paper loaded in the printer and turn it off.

2. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.

3. Remove the paper guide. If a pull tractor or an optional cut-sheet feeder is installed, remove it.

4. Use a soft brush to carefully brush away all dust and dirt from the outer case and paper guide.

5. If the outer case or paper guide is still dirty, clean it with a soft, clean cloth dampened with mild detergent dissolved in water. Keep the printer cover closed to prevent water from getting inside the printer.

Caution
Never use alcohols or thinners to clean the printer; these chemicals can damage the printer components as well as the case.

Be careful not to get water on the printer mechanism or electronic components.

Do not use a hard or abrasive brush.

Do not spray the inside of the printer with lubricants; unsuitable lubricants can damage the printer mechanism. Contact an EPSON dealer if you think lubrication is needed.

Transporting the Printer

If you need to transport your printer some distance, carefully repack it using the original box and packing materials, as described below.

Warning
You need to move the print head by hand to remove the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.

1. Remove any paper in the printer and turn it off.

2. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.

3. Remove the paper guide.

4. If any options are installed, remove them and pack them in their original boxes.

5. Open the printer cover.

6. Make sure that the print head is not hot. Then remove the ribbon cartridge.

7. Repack the printer, ribbon cartridge, and paper guide in the original packing materials and place them in the printer's original box.

Related Documentation

4013016-01   EPSON LQ-680/680Pro User's Guide

TM-LQ680   EPSON LQ-680/680Pro Service Manual

PL-LQ680   EPSON LQ-680Pro Parts Price List